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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,193	09/10/2001	Klas Kristrom	SUNDS-123	2388

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EXAMINER

KOHNER, MATTHEW J

ART UNIT	PAPER NUMBER
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3653

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/936,193

Applicant(s)

KRISTROM ET AL.

Examiner

Matthew J Kohner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10,11 and 13-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10,11 and 13-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendments / Arguments

Applicant has amended the independent claims 10 and 22. Applicant's amendments have overcome the rejection based on the Ingemarsson reference.

In regard to §112 rejection, Applicant has clarified his position. Therefore, the § 112 rejection is withdrawn. However, under the Applicant's clarified position, Examiner contends that claim 15 is indefinite. Claim 10, claims a pulse surface facing said rotary screen, said pulse surface having a shape such that the distance between said pulse surface and said rotary screen decreases in the direction of rotation the decrease beginning from the intersection of the barrier member and the stator. If the decrease begins from the intersection of the barrier and the stator, then it is unclear how the predetermined angle of claim 15 is perpendicular to the direction of rotation of the rotary screen. In other words, if the angle is coming out of the stator at 90°, then it isn't decreasing from the intersection of the barrier member and the stator. Therefore, a new § 112 rejection is made.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. See the above reasons.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-11, 13-16 and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 4,676,903 to Lampenius et al.

Lampenius discloses an apparatus for separating a fiber suspension comprising:

- a housing (Col. 1, lines 10+),
- a stator mounted centrally within said housing (Col. 1, lines 10+),
- a rotary screen mounted between said housing and said stator thereby dividing said housing into a screen chamber between said housing and said rotary screen (Col. 1, lines 10+),
- an accept chamber between said rotary screen and said stator (Col. 1, lines 10+),
- an inlet for providing said fiber suspension to said screen chamber (Col. 1, lines 10+),
- a reject outlet for withdrawing rejected fiber suspension from said screen chamber (Col. 1, lines 10+), and
- an accept outlet for withdrawing accepted fiber suspension from said accept chamber (Col. 1, lines 10+),
- said stator including:
 - at least one barrier member (Col. 3, lines 57+; See also Figs. 3 and 5) fixedly attached to said stator and extending axially along the length of said stator, said at least one barrier member extending radially from said stator to said rotary screen whereby said

accepted fiber suspension is substantially prevented from tangentially passing said at least one barrier member and said at least one barrier member creates a pulse (see e.g. Col. 1, lines 60+; Col. 4, lines 16+) through said rotary screen, said at least one barrier member including

- a pulse surface facing said rotary screen, said pulse surface having a shape such that the distance between said pulse surface and said rotary screen decreases in the direction of rotation (Col. 3, lines 67+; See also Figs. 3 and 5), the decrease beginning from the intersection of the barrier member and the stator.

Lampenius does not disclose that the rotary screen is rotatably mounted. Instead, Lampenius discloses that the rotor rotates. However, rotating the screen instead of the rotor is well known and would be obvious to one of ordinary skill in the art.

In regard to claim 11, see abstract.

In regard to claims 13-16 and 23, see Figs. 3 and 5.

In regard to claims 18-19, see Figs. 3 and 5.

In regard to claim 20, Lampenius does not specifically disclose the minimum distance between the at least one barrier member and the screen. However, setting the distance to a particular amount, such as 4-10mm, would be obvious to one of ordinary skill in the art.

In regard to claim 21, see Figs. 3 and 5.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lampenius in view of US Patent No. 6,071,378 to Saito.

Lampenius does not specifically disclose that the rotary screen has a conical shape. However, this is well known in the art (See e.g. US Patents Nos. 6,071,378 to Saito[#20]; 6,360,897 to Forslund et al.; 6,170,769 to Bergdahl et al.). Using a conical screen would be obvious to one of ordinary skill in the art.

Claims 10-11, 13-16 and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,147,543 to Frejborg.

Frejborg discloses an apparatus for separating a fiber suspension comprising:

- a housing (Col. 1, lines 24+),
- a stator mounted centrally within said housing (Col. 1, lines 24+),
- a rotary screen mounted between said housing and said stator thereby dividing said housing into a screen chamber between said housing and said rotary screen (Col. 1, lines 24+),
- an accept chamber between said rotary screen and said stator (Col. 1, lines 24+),
- an inlet for providing said fiber suspension to said screen chamber (Col. 1, lines 24+),
- a reject outlet for withdrawing rejected fiber suspension from said screen chamber (Col. 1, lines 24+), and
- an accept outlet for withdrawing accepted fiber suspension from said accept chamber (Col. 1, lines 24+),
- said stator including:

- at least one barrier member (See Fig. 1) fixedly attached to said stator and extending axially along the length of said stator, said at least one barrier member extending radially from said stator to said rotary screen whereby said accepted fiber suspension is substantially prevented from tangentially passing said at least one barrier member and said at least one barrier member creates a pulse (see e.g. Col. 4, lines 16+) through said rotary screen, said at least one barrier member including

- a pulse surface facing said rotary screen, said pulse surface having a shape such that the distance between said pulse surface and said rotary screen decreases in the direction of rotation (Col. 4, lines 36-65; See also Fig. 1), the decrease beginning from the intersection of the barrier member and the stator.

Frejborg does not disclose that the rotary screen is rotatably mounted. Instead, Frejborg discloses that the rotor rotates. However, rotating the screen instead of the rotor is well known and would be obvious to one of ordinary skill in the art.

In regard to claim 11, see abstract.

In regard to claims 13-16 and 23, see Fig. 1.

In regard to claims 18-19, see Fig. 1.

In regard to claim 20, Frejborg does not specifically disclose the minimum distance between the at least one barrier member and the screen. However, setting the distance to a particular amount, such as 4-10mm, would be obvious to one of ordinary skill in the art.

In regard to claim 21, see Fig. 1.

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Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frejborg in view of US Patent No. 6,071,378 to Saito.

Frejborg does not specifically disclose that the rotary screen has a conical shape. However, this is well known in the art (See e.g. US Patents Nos. 6,071,378 to Saito[#20]; 6,360,897 to Forslund et al.; 6,170,769 to Bergdahl et al.). Using a conical screen would be obvious to one of ordinary skill in the art.

Conclusion

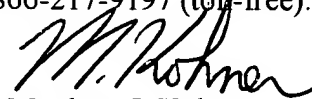
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Kohner whose telephone number is 703-305-8496. The examiner can normally be reached on Mon-Fri 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Walsh can be reached on 703-306-4173. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

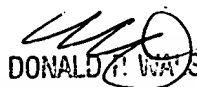


Matthew J. Kohner

Examiner

Art Unit 3653

mjk



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